

ABSTRACT**BEAM ASSOCIATION IN RANDOM ACCESS PROCEDURES**

Methods, systems, and devices for wireless communications are described. A user equipment (UE) may determine a mapping between synchronization signal blocks (SSBs) and a random access message of a two-step random access procedure based on an indication in system information signaling or radio resource control (RRC) signaling. The random access message may include a random access preamble and a random access payload. The UE may determine, based on the mapping, an association between one or more beams carrying the SSBs and one or more additional beams carrying the random access preamble and the random access payload of the random access message. As a result, the UE may perform the two-step random access procedure with a base station according to the beam association, and coexist with a four-step random access procedure in a more reliable and efficient manner.

Fig. 8